

We claim:

1. A process for the manufacture of a baleable carboxylate terminated polymer comprising polymerizing at least one conjugated diene in the presence of an organolithium initiator substantially to completion and terminating said reaction via the addition of carbon dioxide so as to provide said carboxylate terminated polymer.
2. The process of claim 1 wherein said conjugated diene is one or more of 1,3-butadiene, isoprene, 2,3-dimethyl-1,3-butadiene, and 1,3-pentadiene.
- 10 3. The process of claim 1 further comprising additional monomers including vinyl aromatic hydrocarbons and alkenes.
4. The process of claim 1 wherein said carboxylate terminated polymer has a bulk viscosity of greater than about 45.
- 15 5. The process of claim 1 wherein said carboxylate terminated polymer has a solution viscosity of less than about 75 cP.
6. The process of claim 1 wherein said carbon dioxide is added in an amount of
20 at least about 0.5 a molar equivalent of said organolithium initiator.
7. The process of claim 1 wherein said carbon dioxide is added in an amount greater than the amount of said organolithium initiator.

WD 8. The process of claim 1 wherein said carboxylate terminated polymer is further added to a HIPS or SMA resin.

5 9. The process of claim 5 wherein a polar compound is added to said carboxylate terminated polymer.

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a7 10. The process of claim 1 wherein the polymerization is continuous.

10 11. A baled, low solution viscosity polymer comprising conjugated diene contributed monomer units and carboxylate terminal groups.

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12. The polymer of claim 11 further comprising monomer contributed units selected from the group comprising vinyl aromatic hydrocarbons.

15 13. The polymer of claim 11 further comprising an initiator residue such as Li⁺.

14. The polymer of claim 12 wherein said vinyl aromatic hydrocarbons are one or more of styrene, α -methylstyrene, vinyl toluene, ethyl styrene, vinyl naphthalene, vinyl ethynaphthalene, vinyl methyl naphthalene, vinyl butyl naphthalene, vinyl diphenyl, vinyl 20 diphenylethane, 4-vinyl-4'-methyldiphenyl, and the like.

15. The polymer of claim 11 wherein the polymerization was initiated by a hydrocarbyl lithium.

25 16. The polymer of claim 15 wherein said hydrocarbyl lithium is n-butyl lithium.

17. The polymer of claim 11 wherein said solution viscosity is below about 75 cP.

18. The polymer of claim 11 wherein the Mooney Viscosity is above about 45.

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19. A rubber-modified high impact polystyrene or styrene-maleic anhydride polymer wherein said rubber comprises a baleable carboxylate terminated polybutadiene.

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20. The polymer of claim 20, wherein said polybutadiene comprises a solution viscosity below about 75 cP and a Mooney Viscosity above about 45.

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